Name _____   Date _____

Additional Exercises 3.4
Form I
The Slope-Intercept Form of the Equation of a Line

Find the slope of the line with the given equation.

1. $y = -8x$ 1. _____

2. $y = 6x - 7$ 2. _____

3. $y = 10$ 3. _____

4. $y = \dfrac{1}{4}x + 3$ 4. _____

5. $y = 9 - x$ 5. _____

Solve each equation for y, to put the equation in slope intercept form. Then find the slope and the y-intercept of the line.

6. $3x + y = 8$ 6. _____

7. $2x + y = 0$ 7. _____
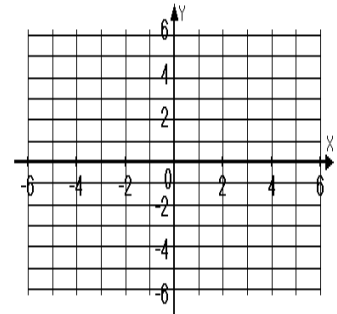
8. $4x - y = 7$ 8. _____

9. $y = 2$ 9. _____

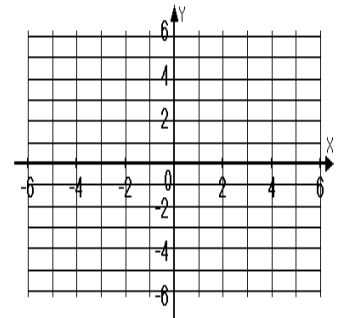10. $2x + 3y = 6$ 10. _____
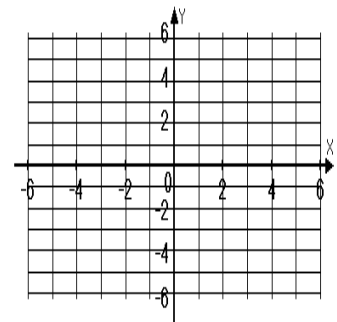
Name _____   Date _____

Graph the linear equation using the slope and y-intercept.

11. $y = 2x - 4$ 11.

12. $y = -3x + 2$ 12.

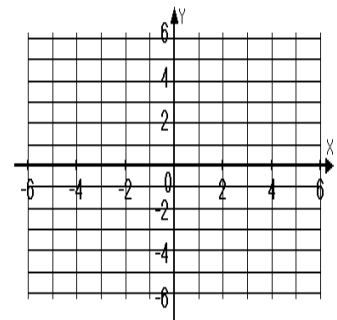13. $y = -\dfrac{1}{3}x$ 13.

(a) Graph both linear equations on the rectangular coordinate system and (b) decide whether or not the lines are parallel.

14. $y = 2x + 3$ 14.
       $y = 2x - 1$

15.   When a tow truck is called, the cost of service is given by the   15. _____
       linear function $y = 3x + 65$, where y is in dollars and x is the
       number of miles the car is towed. Find and interpret the slope
       and the y-intercept of the linear equation.

Name _____   Date _____

Additional Exercises 3.4
Form II
The Slope-Intercept Form of the Equation of a Line

Find the slope of the line with the given equation.

1. $y = -\dfrac{2}{3}x + 4$ 1. _____

2. $y = \dfrac{3}{5}x - 1$ 2. _____

3. $y = -5$ 3. _____

4. $y = 5x$ 4. _____

5. $y = 7 - 2x$ 5. _____

Solve each equation for *y*, to put the equation in slope intercept form. Then fund the slope and the *y*-intercept of the line.

6. $3x + 4y = 16$ 6. _____

7. $2x - 4y = 4$ 7. _____

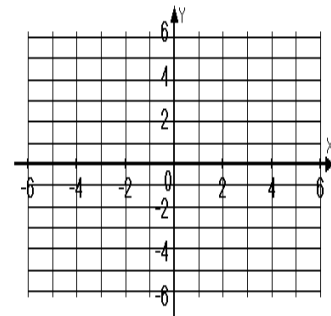8. $x - 6y = 12$ 8. _____

9. $3y = -9$ 9. _____

10. $2x + 4y = -2$ 10. _____

Name _____   Date _____

Graph the linear equation using the slope and *y*-intercept.

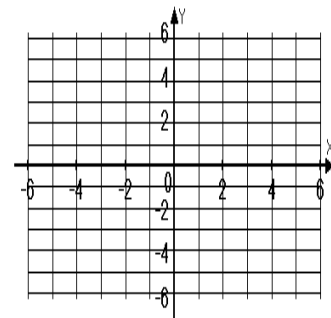11. $2x + 4y = -16$ 11.

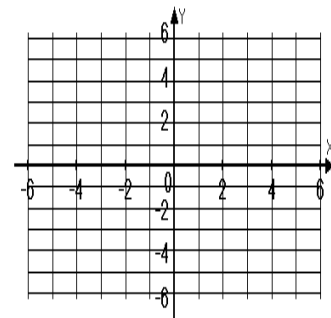12. $3x - y = 2$ 12.

13. $5y = -2x + 10$ 13.
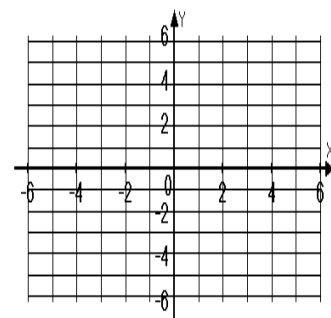

(a) Graph both linear equations on the rectangular coordinate system
and (b) decide whether or not the lines are parallel.

14. $y = x - 4$ 14.
        $y = -x + 4$

15.   The amount of water in a leaky bucket is given by the linear   15. _____
        function $y = 110 - 3x$, where *y* is in ounces and *x* is in minutes.
        Find and interpret the slope and *y*-intercept of the linear
        equation.

Name _____   Date _____

Additional Exercises 3.4
Form III
The Slope-Intercept Form of the Equation of a Line

Find the slope and the *y*-intercept of the line with the given equation.

1. $y = \dfrac{4}{3}x + 5$ 1. _____

2. $y = -3x - 7$ 2. _____

3. $y = x$ 3. _____

4. $y = 8$ 4. _____

5. $y = 6 - \dfrac{1}{3}x$ 5. _____

Solve each equation for *y*, to put the equation in slope intercept form. Then find the slope and the *y*-intercept of the line.

6. $2x - y = 11$ 6. _____

7. $-3y = 2x + 5$ 7. _____

8. $x - 4y = 4$ 8. _____

9. $-3y = -12$ 9. _____

10. $-6x + 8y = 8$ 10. _____

Name _____   Date _____

Graph the linear equation using the slope and *y*-intercept.
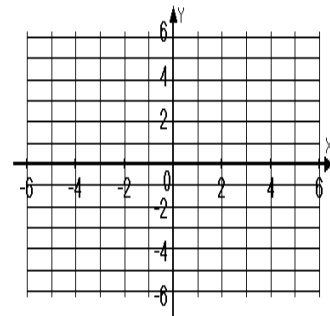
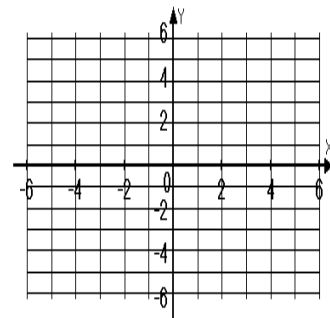11. $3x + y = -2$ 11.

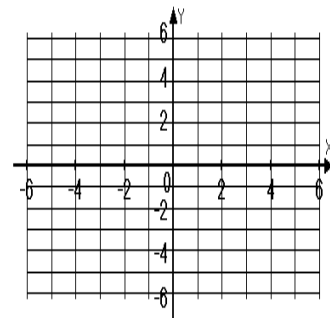12. $5x - 2y = 4$ 12.

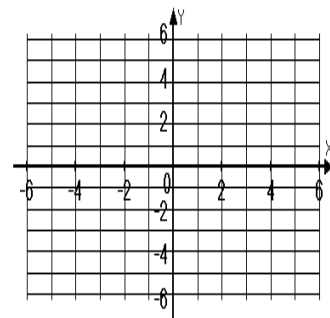13. $3x = 2y$ 13.

(a) Graph both linear equations on the rectangular coordinate system
and (b) decide whether or not the lines are parallel.

14. $3x - y = -2$ 14.
        $x + 3y = 6$

15.   The speed of a ball dropped from a tower is given by the linear   15. _____
        function $y = 32x$, where *y* is in feet per second and *x* is the
        number of seconds since the ball was dropped. Find and
        interpret the slope and *y*-intercept of the linear equation.